

## CLAIMS

1. (previously presented) A process for microwave destruction of solid harmful contaminated waste comprising:
  - compacting said waste on a platform, wherein said platform contains a carbonaceous substance;
  - radiating said platform with microwaves to produce pyrolysis of said waste;
  - collecting vapors from said pyrolysis with a purge gas; and
  - treating said purge gas with microwaves while passing through an oxidation catalyst bed energized with a carbonaceous substance, wherein said purge gas exit temperature does not exceed 300 °F.
2. (previously presented) The process according to claim 1 wherein said harmful contaminated waste further comprises being selected from the group consisting of chemical agents, biological agents, and medical waste.
3. (original) The process according to claim 1 wherein all carbonaceous substances further comprise being selected from the group consisting of activated carbon, char, soot, pyrolytic carbon, activated charcoal, metal carbides, and combinations thereof.
4. (original) The process according to claim 1 wherein said purge gas further comprises significant oxygen in order to enhance pyrolysis.
5. (original) The process according to claim 1 wherein said oxidation catalyst bed energized with a carbonaceous substance further comprises being selected from the group consisting of silicon carbide pellets mixed with oxidation catalyst particles, oxidation catalyst particles with a substrate impregnated with silicon carbide, and oxidation catalyst particles deposited over a center of silicon carbide.
- 6-15. (canceled)
16. (currently amended) A process for microwave destruction of solid harmful contaminated waste comprising:
  - compacting said waste on a platform, wherein said platform contains silicon carbide;
  - radiating ~~from above~~ said platform and said waste with microwaves to produce pyrolysis of said waste;
  - collecting vapors from said pyrolysis with an oxygen containing purge gas; and
  - performing microwave catalysis while passing said purge gas through an oxidation catalyst, wherein said purge gas exit temperature does not exceed 300 °F.

17. (currently amended) The process according to ~~claim 7~~ claim 16 wherein said harmful contaminated waste further comprises being selected from the group consisting of chemical agents, biological agents, and medical waste.
18. (currently amended) The process according to ~~claim 7~~ claim 16 wherein said microwave catalysis further comprises being selected from the group consisting of silicon carbide pellets mixed with oxidation catalyst particles, oxidation catalyst particles with a substrate impregnated with silicon carbide, and oxidation catalyst particles deposited over a center of silicon carbide.